High-Level Control System in C# in 5 minutes

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High-Level ALS Control System

- Migrating to EPICS since 1993!
- Finally, .NET has become an official choice.
- High-Level means above CA.DLL
- .NET + SCA.NET = Best for EPICS Clients
- Operator Console = Windows Vista (UAC on)
  - EPICS DM, Matlab on X11
  - LabView
  - All the new apps in C#

Industry Standard

Software Development

- Visual Studio 2008 ← Extremely Powerful

.NET 3.5	C# 3.0	32/64
Mono	Database	XML
Testing	Debug	Deploy
Doc	Profiling	Parallel

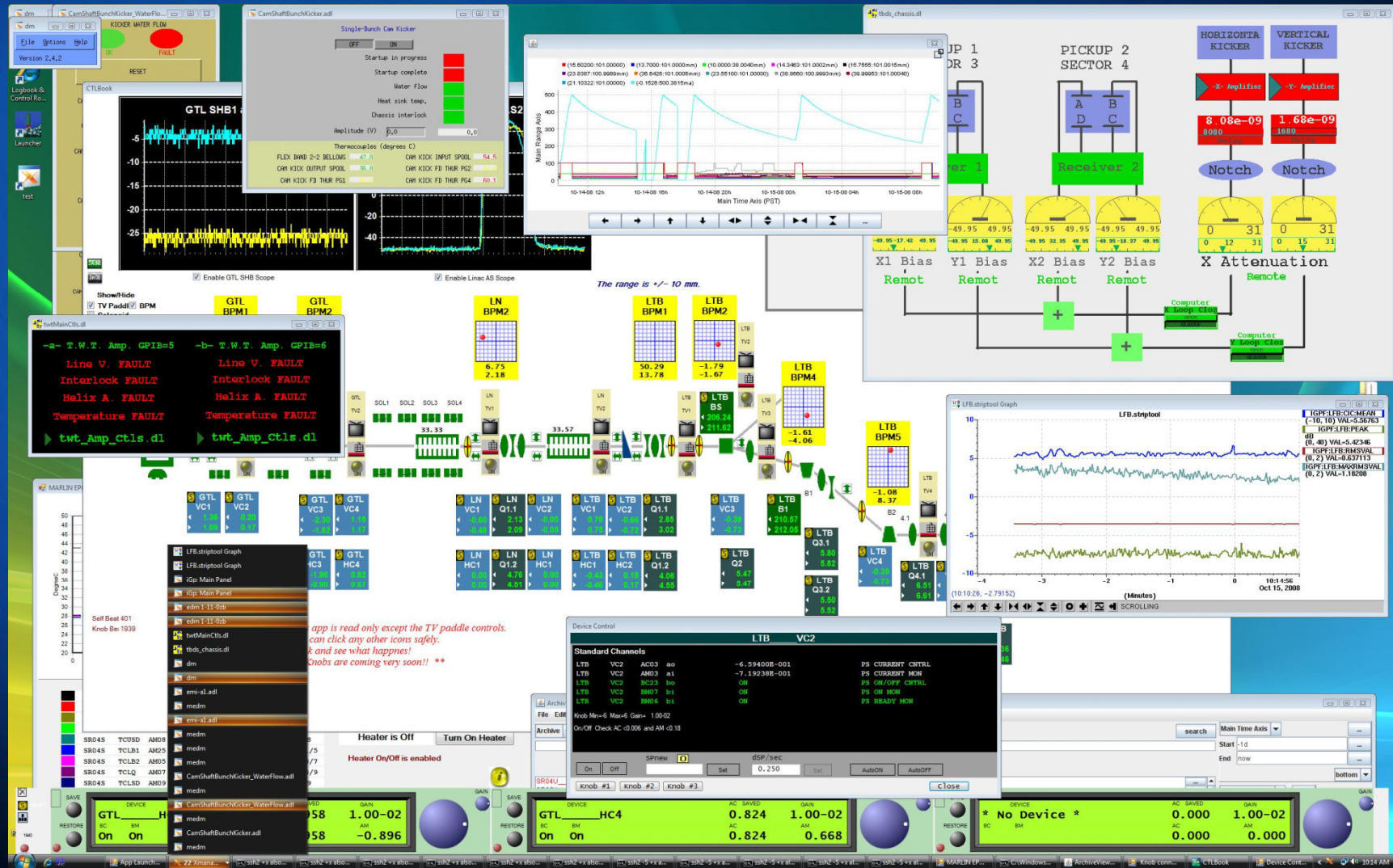SCA.NET

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Data-Driven Architecture

- EPICS Channels by Database
  - ADO.NET to MySQL
- Extensive use of XML
  - Devices in XML
  - New apps use XML for all the configuration
- Started using LINQ
  - Covers Database, XML and objects.

Component-Based Approach

- SCA.NET
- Custom GUI Control
- Custom EPICS Control
- Custom XML Component
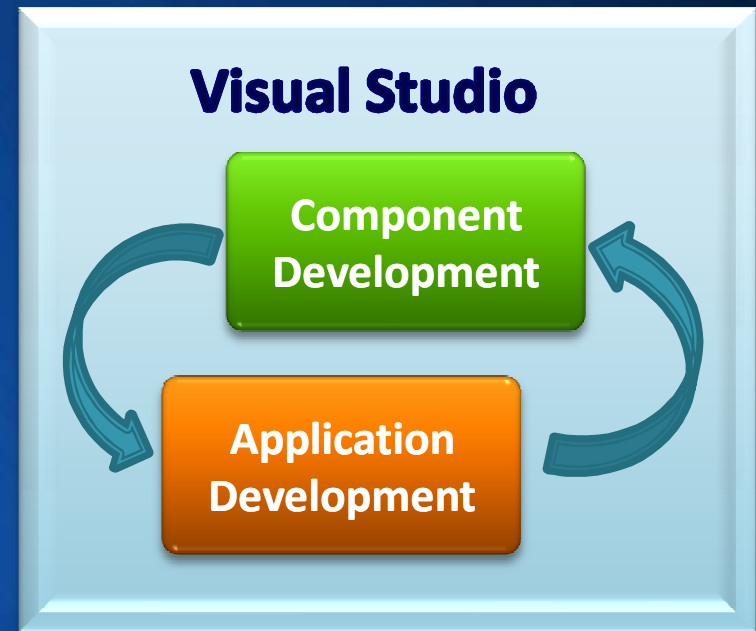
A New Desktop

Let's Collaborate on .NET!

- SCA.NET is CA, not SCA. Your EPICS is OK.
- 32-bit and 64-bit
- Linux, Mac, Solaris, ... by MONO 2.0
- Multi-Core to Many-Core
- Various Programming Languages
  - C#, Visual Baisc.NET, Java, ...
  - Ruby, Python, Perl, ...
- Database, XML, Networking, .. are all there.